

RESEARCH BRIEF

April 2017

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Geography of Poverty in Pakistan: Explaining regional inequality

Geography of Poverty in Pakistan 2008-09 to 2012-13: Distribution, trends and explanations (Naveed, Wood and Ghaus 2016) presented the estimates of multidimensional poverty in Pakistan, its trends from 2008-09 to 2012-13 and its spatial distribution. The report highlighted the extent of rural – urban, inter-provincial and intra-provincial inequalities in the incidence and intensity of multidimensional poverty through district level analysis.¹ The huge diversity along several dimensions within the national boundary of Pakistan implies that there is no single explanation of poverty and thus importantly no valid single policy intervention to remove it. It argued that there are different ways in which people have been poor, remain poor and will continue to be poor unless public policy and intelligent resources are focused upon poverty reproduction taking into account its diversity. The report identified several potential explanations to the tremendous regional inequality and diversity in poverty. This research brief provides an overview of these factors that potentially underlying regional inequalities in the incidence of multidimensional poverty in Pakistan.

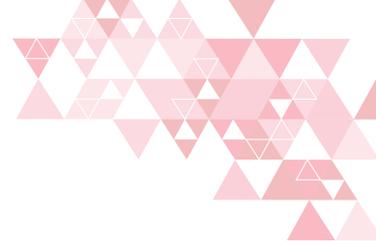
Explaining differences in poverty

First, there is polarization with broadly the West and South experiencing very high rates of poverty—especially Balochistan, Sindh, KP and also Southern Punjab which constitute the Extreme Poverty Zones and High Poverty Zones in contrast to the Northern parts of Punjab making the Low Poverty Zone. An early policy concern from this over-arching spatial pattern is that policy levers such as education and health perhaps do not have the same leverage when applied across this diversity, and the more universal initiatives like cash transfer programmes cannot deliver universal impact. Poverty, in its extreme locations, is more inelastic, not only as a response to growth, but also perhaps in its socio-cultural and economic embeddedness.

Second, there is a contrast between relative urban inclusiveness with low poverty and high incidence of poverty in remote areas away from growth pole centres. The Extreme Poverty Zones 1 and 2 and High Poverty Zone -1 are largely rural territories, whereas the Low Poverty Zone is mostly urban. Thus while the whole of Pakistan reveals a centre-periphery picture (northern Punjab versus the rest, or at a lower level, provincial capitals and the rest of the districts in each province), the urban-rural contrast reveals strong centre-periphery relations even within otherwise high poverty provinces like Sindh, when Karachi and Hyderabad are considered. And if northern Punjab from Lahore to its north and west, stretching through Attock and Nowshera to Peshawar in KP is considered a peri-urban area, served by denser road infrastructure than elsewhere in the country, then this analysis is reinforced.

Third, population density is not distributed equally across the spatial areas of Pakistan. Population share increases with the decreasing levels of poverty across zones. Sparse population in the poorest zones also points towards a fundamental deficit of democracy. The key political actors, in a democratic setting, inherently tend to be more responsive to the demands of majority population groups often at the cost of smaller 'vote banks'. In the absence of further constitutional guarantees, which ensure the poverty measures like headcount ratios cannot be disproportionately high in certain zones, democracy in itself will continue to favour the already privileged zones. Moreover, as there are economies of density in the production of public services, managerial aspects of public services also work against low density areas since

¹ Reducing this complexity while retaining the distinction between various levels of poverty, the report adopted the quintile based approach to classify the districts of Pakistan into five zones of poverty based on district level poverty headcount ratio in 2012-13. These zones are: Extreme Poverty Zone - 1, Extreme Poverty Zone - 2, High Poverty Zone - 1, High Poverty Zone - 2 and Low Poverty Zone. Annex 1 presents the list of districts within each zone. While the mapping of poverty showed high degree of geographic proximity for districts in each zone, the classification does not take province into account. List of districts in each zone is provided in Anex.



the costs of service delivery in sparsely dense areas are very high. Sparse population in the poorest zones also point towards the distinct forms of social organizations with potentially higher reliance on informal networks such as feudal and tribal structures to access public goods and services with repercussions for the prospects of poverty reduction in such communities.

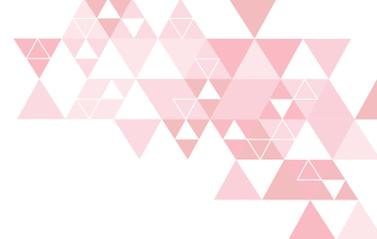
Fourth, linked to rurality and population density is the access to and quality of public services which is greatly differentiated across poverty zones. Poverty in general and the measures of multidimensional poverty in particular are inherently influenced by citizens' access to and utilization of public services. The zones with the high levels of poverty are characterized with the poor service delivery. These low satisfaction levels with the public services reported by the citizens in the Extreme Poverty Zones provide insights into the deep seated problems with the public services delivery particularly those in the rural, agrarian regions where access to public resources is heavily mediated by the patron-client networks and state resources are used for the gains of local elites and public officials. There is thus a close relationship between the functioning, efficiency and transparency of the organizations of public services delivery and poverty outcomes. Districts far from the provincial cores particularly appear to suffer from poor provision of public services that contributes towards the persistence of poverty.

Fifth, the combination of evidence about inequality and polarization (including urban-rural) speaks to the familiar theory of undeveloped regions, analyzed for example as far back as 1957 by Gunnar Myrdal for Europe. The basic argument is about the economies of agglomeration as primary industry attracts necessarily associated commercial activity and services, in turn requiring public sector infrastructure support which sets in motion further industrial and commercial investment to take advantage of what already exists. Similar arguments are made later on by Krugman (1991) to explain the inherent tendency for economic activities to concentrate geographically given the increasing returns to scale. Agglomeration offers firms the opportunity to benefit from value chain networks, presence of appropriately skilled labor-force, an overall knowledge diffusion, and the availability of financial services and other commercial facilities. There are thus tremendous spill overs for the firms to be based in close proximity with each other and in large cities.

Burki and Khan (2010) examined the agglomeration of the manufacturing industries in Pakistan and its emergence over time. They report that the districts with the highest and the medium industrial concentration are clustered around metropolitan cities of Karachi and Lahore – districts that constitute the Low Poverty Zone. Burki and Khan identify several factors causing the agglomeration of the manufacturing industries in a few districts around Lahore and Karachi (and lack thereof in others) particularly the size of the district level population (consumer markets), road density (transportation) in the industry, and the pool of technically trained workers (labour force) in the district which to them are the causes of low manufacturing activities in the remote districts. The relationship between the geography of poverty and industrial concentration is very obvious in Pakistan. The economic opportunities offered by the process of industrialization are not available to those living in the districts in the Extreme Poverty Zone – 1 and Extreme Poverty Zone – 2 as well as in several other districts except for those in the Low Poverty Zones.

Sixth, Balochistan and Sindh both have significant natural resources in natural gas, coal and other minerals, but the exploitation of these resources has not yet impacted upon poverty in these regions. Instead, there is a pattern of 'resource curse' as the resource rich districts fall in the Extreme Poverty Zones. Natural gas reserves provide an excellent example in this regard. With 12.5 trillion cubic feet, Dera Bugti alone had 46.7 per cent of the total gas reserves in Pakistan in 2012 (GOP 2012a; GOP 2012b). Similarly, with 6.7 trillion cubic feet, Ghotki had more than a quarter of the total gas reserves and Dadu had almost nine per cent of the total gas reserves (ibid.). Tharparker had the largest coal reserves in the country (GOP 2012b). In complete contrast to their resource richness, Dera Bugti and Tharparker are in the Extreme Poverty Zone -1, and Ghotki and Dadu in the High poverty Zone. These districts are thus extremely poor. Other notable districts with significant natural gas reserves include Khairpur, Kashmore and Sukkur.

If environment is taken as a natural resource to be exploited for fossil fuel energy production, Muzaffargarh and Lasbella present the acute case of resource curse. With nearly 8000 Gigawatts per hour, Muzaffargarh makes 20 per cent contribution to the total thermal power generation capacity in the country (GOP 2012c). A new coal power plant is currently being established in the district. Moreover, Pakistan's largest oil refinery, the Pak Arab Oil Refinery is also established in Muzaffargarh. All these fossil fuel establishments are installed in close geographic proximity to each other. The district had nearly half of the population poor in 2012-13 and hosted third largest population of the poor. Similarly, with 8000 Gigawatts per hour, Lasbella makes 20 per cent contribution to country's thermal power production (ibid.) and is in the Extreme Poverty Zone – 2. Although different in nature from the exploitation of other natural resources, fossil fuel industry worsens environment and causes irreparable losses to human health and ecological conditions in the long run particularly when it is concentrated in small geographic areas with an overwhelming proportion of population already living below the poverty line.



Thus, natural resources do not seem to be the drivers of poverty reduction in many of the poorest districts. Partly the absence of trickle down or trickle across effects is a function of ownership of these resources and the ways in which these resources are allocated for exploration and exploitation. Several layers of authority, federal, provincial and local governments (if and when the latter exist) and the local power structures mediate any trickle down potential. Poor governance at various levels has led to monopolistic rent-seeking around these resources. But, resource exploitation also requires skilled employment using advanced technologies, which de facto exclude the local, poor, illiterate and semi-literate, under-educated population from these opportunities. Thus such natural resource endowments are more likely to lead to the forms of industrialization, where we witness slavery like working conditions as in the case of mining sector.

Seventh, across Pakistan, like elsewhere in the sub-continent, we need to ask whether physical mobility (migration) within regions and the country as well as externally has the function in the longer term of converging the intra provincial and inter district differences indicated by the data, or whether such mobility reinforces the 'pull' of working age populations towards growth pole centres and sub-regions. KP is especially affected by this, with high incidence of out-migration of some family members for employment in Middle Eastern countries and in various major cities within Pakistan. Districts with the highest international migration include Kohat, Bannu, Swat, Hangu, Swabi, D.G. Khan and Sialkot, and they had more than one per cent of their population registered as overseas workers in 2012-13 (GOP 2013). In contrast, districts of Balochistan, including Dera Bugti, Qilla Saifullah, Turbat, Jhal Magsi, Qilla Abdullah, Bolan and Pishin have the smallest proportion of population registered as overseas workers in the year 2012-13 (ibid.). The degree of KP and indeed FATA remittance dependency needs further research. But within the country, income data would also affect urban-rural polarization with urban incomes from temporary and cyclical migration supporting rural short-term consumption, which is not revealed in asset data. Once again, this has implications for policy towards investing in people's ability to gain incomes from outside their own underdeveloped residential areas in other growth pole centres — a process which might have the function of reinforcing polarization rather than suppressing it, though choices of measures will lead to different outcomes. Patterns of migration, particularly the destination of immigrants if we have enough geographic data, can be related to the poverty in their districts of origins.

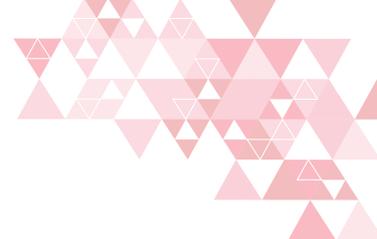
Eighth, in the strongly patriarchal environments of rural Pakistan, especially its remoter areas with the higher incidences of poverty as revealed by the data, physical mobility is more confined to men with significant gender implications for de facto family structure in the locations where poverty is actually experienced. Restriction on mobility, variable across the country, has tremendous implications for women's access to education and healthcare opportunities, and wider participation in the social and economic spheres of life. We also need to understand more about the incidence of female headed and female managed households in the areas reporting highest poverty, and also both the de facto exclusions of those families from local level social capital and other community support as well as the de facto desertion of those women by men who have ended up settling more permanently in urban locations of employment, taking additional wives/partners. More generally these observations should focus our attention upon the feminisation of poverty, especially extreme poverty, which is noted elsewhere in the sub-continent.

While there is enough evidence that women suffer the most under the conditions of poverty, there is a need to explore the extent to which adverse positioning of women in the household (intra-household distribution of resources and opportunities) and in the community (re)produce the conditions of poverty. Although we could not sufficiently explore the gender dynamics of poverty in this report, significant cultural diversity in Pakistan suggests the possibility of the diverse nature of gender relations prevalent across sub-cultures, ethnicities, regions and districts. Additional research on diversity of gender relations across the geography of Pakistan can help understand the gender-poverty-inequality nexus.

Ninth, districts in the poorest zones are simultaneously characterized with recurring natural disasters, such as cyclones, floods, earthquakes and droughts, and poor infrastructural capacity to deal with these disasters. Many of the districts in the poorest zones also suffer from endemic violence and active conflict. Within these zones, poor households suffer the most given their existing social and economic vulnerability due to poverty. Cyclone Yemyin in 2007, for example, affected 2.5 million population, destroying more than 71 thousand houses in Balochistan and Sindh, mainly in the districts classified in the Extreme Poverty Zones 1 and 2 (GOP 2015). Similarly, floods affected 20 million populations in 2010, 9.3 million in 2011, 4.8 million in 2012, 1.5 million in 2013, and 2.5 million in 2014. Districts around the Indus river, including those in the north of KP, south of KP and Punjab, and most districts of Sindh, with very high incidence of poverty, are particularly prone to catastrophic floods, greatly affecting lives, livelihoods and living conditions of the poor population. Other natural disasters, such as earthquakes, and droughts are also very recurring in the Extreme Poverty Zones districts in Balochistan, some parts of KP and Tharparker in Sindh.

Similarly, the mapping of conflict also shows relationship between violence and poverty.² The most conflict prone areas of Pakistan are in FATA which are not covered in the PSLM but are expected to be extremely poor. Several districts in KP and

² http://www.usip.org/sites/default/files/PW93-Mapping_Conflict_Trends_in_Pakistan.pdf



Balochistan experiencing very high poverty also have high incidents of terrorism, sectarian violence and armed insurgency. Some urban centres with low poverty headcount ratios, such as Karachi and Quetta, also have high conflict. Perhaps the nature of conflict varies in the poor and the least poor regions. The ways in which conflict affects poverty or poverty perpetuates conflict need to be investigated further in order to break the relationship between the two and build the resilience of the poor communities and households.

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Annexes:

Table A.1: Zones of Poverty

Zones	Districts
Extreme Poverty Zone – 1	Districts in the northeast and southwest of Balochistan, south of Sindh and north of KP. Awaran, Badin, Barkhan, Bolan/Kachhi, Chaghi, Dera Bugti, Harnai, Jhal Magsi, Kohistan, Kohlu, Musakhel, Nasirabad, Panjgur, Qilla Abdullah, Qilla Saifullah, Tharparkar, Thatta, Torgar h, Umer Kot, Upper Dir, Washuk, Sherani, Zhob.
Extreme Poverty Zone – 2	Districts mainly in the centre but also in the north and south of Balochistan, east and northwest of Sindh, south of Punjab and KP and north of KP. Batagram, DG Khan, DI Khan, Jaccobabad, Jaffarabad, Kalat, Kashmir, Keych/Turbat, Kharan, Khuzdar, Lasbella, Loralai, Lower Dir, Mirpur Khas, Nawabshah, Pashin, Rajanpur, Shahdadkot, Shangla, Shikarpur, Tando Allah Yar, Tando Mohammad Khan, Tank.
High Poverty Zone – 1	Districts in the southwest and centre of Balochistan, west of Sindh, south of Punjab, centre-south and north of KP. Bahawalpur, Bannu, Bhakar, Bonair, Dadu, Gawadar, Ghotki, Hangu, Jamshoro, Karak, Khairpur, Lakki Marwat, Lodhran, Mastung, Mitiari, Muzaffargarh, Naushki, Naushahro Feroze, Rahim Yar Kahn, Sanghar, Swat, Vehari, Ziarat.
High Poverty Zone - 2	Districts in the centre of Balochistan, north of KP, centre-south of Punjab and centre and north of KP. Bahawalnagar, Charsadda, Chiniot, Chitral, Jhang, Kasur, Khanewal, Khushab, Kohat, Larkana, Layyeh, Mianwali, Malakand, Mansehra, Mardan, Multan, Narowal, Okara, Pakpattan, Sahiwal, Sibi, Sukkur, Swabi
Low Poverty Zone	Districts in the southwest of Sindh, north of Punjab and centre/centre east of KP. Abbottabad, Attock, Chakwal, Faisalabad, Gujranwala, Gujrat, Hafizabad, Haripur, Hyderabad, Islamabad, Jhelum, Karachi, Lahore, Mandi Bahauddin, Nankana Sahab, Newshehra, Peshawar, Quetta, Rawalpindi, Sargodha, Sheikhpura, Sialkot, Toba Tek Singh.